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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/735,468

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Craig A. McKnight

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EXAMINER

SINGH, PREM C

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/735,468

Applicant(s)

MCKNIGHT ET AL.

Examiner

Prem C. Singh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 1 c) is objected to because of the following informalities:

The third line should read, ".....effective pressure such that substantially all..."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by Brignac et al (US Patent 6,197,718).

Claim 1.

Brignac invention discloses, "A process for the activation of a Co Mo supported catalyst for the selective hydrodesulfurization of cat naphtha without saturating a significant amount of the olefins, which process comprises:

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- a) heating the catalyst to a temperature of about 350°F to about 450°F in an effective amount of time, in presence of hydrogen and hydrogen sulfide, and in the presence of virgin naphtha at an effective pressure such that the environment is not a reducing environment;
- b) holding the catalyst at 350°F to about 450°F for an effective amount of time so that at least 20% of the metals that will sulfide will sulfide; and
- c) further heating said catalyst to a temperature from about 550°F to 700°F in the presence of hydrogen and hydrogen sulfide and in the presence of virgin naphtha and at an effective pressure such that the environment is non-reducing, so that substantially all of the metals are sulfided." (Column 2, lines 52-67; column 3, lines 1-3).

Brignac invention further discloses, "In another preferred embodiment of the present invention the total pressure is from about 200 to 400 psig." (Column 3, lines 7-8).

Claims 2, 9.

Brignac invention discloses, "The cracked naphtha feedstock generally comprises an overall olefins concentration ranging as high as about 60 wt%, more typically about 5 wt% to 50 wt%." (Column 3, lines 52-54).

Claims 3, 10.

Brignac invention discloses, "The cracked naphtha feedstock can comprise a diene concentration of as much as 15 wt %, preferably from about 0.02 wt% to about 15 wt%." (Column 3, lines 56-58).

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Claims 4, 11.

Brignac invention discloses, "The temperature of step (a) is obtained by ramping at a rate of 10°F to 80°F (-12 to 27°C) per hour." (Column 3, lines 4-6).

Claims 5, 12.

Brignac invention discloses, "The total pressure is from about 200 to 400 psig." (Column 3, line 8).

Claims 6, 13.

Brignac invention discloses, "The cracked naphtha feedstock sulfur content will generally range from about 0.05 wt % to about 0.7 wt %." (Column 3, lines 61-63).

Claims 7, 14, 15.

Brignac invention discloses, "The naphtha feedstock generally contains cracked naphtha which usually comprises fluid catalytic cracking unit naphtha (cat naphtha), coker naphtha, hydrocracker naphtha, resid hydrotreater naphtha." (Column 3, lines 37-41). "The activity test used an intermediate/heavy cat naphtha feed with a 162-475°F boiling range." (Column 5, lines 63-65).

Claim 8.

Brignac invention discloses, "The test was performed in an isothermal, downflow, all vapor phase pilot plant. The activity test used an intermediate/heavy cat naphtha

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feed with a 162-475°F boiling range, 1850 wppm total sulfur.” (Column 5, lines 63-66).

“Space velocity was held constant at 6.5 LHSV, HDS levels range between 97.4 and 96.1% and olefin saturation between 46.7 and 40.2%.” (Column 6, lines 3-6).

Brignac invention further discloses, “ a) heating the catalyst to a temperature of about 350°F to about 450°F in an effective amount of time, in presence of hydrogen and hydrogen sulfide, and in the presence of virgin naphtha at an effective pressure such that the environment is not a reducing environment;

b) holding the catalyst at 350°F to about 450°F for an effective amount of time so that at least 20% of the metals that will sulfide will sulfide; and

c) further heating said catalyst to a temperature from about 550°F to 700°F in the presence of hydrogen and hydrogen sulfide and in the presence of virgin naphtha and at an effective pressure such that the environment is non-reducing, so that substantially all of the metals are sulfided.” (Column 2, lines 56-67; column 3, lines 1-3).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-15 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,197,718.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims draw to the same process. Even though the patented claimed set claims a catalyst comprising a CoMo support, the present claimed set does not exclude the use of a CoMo support.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Haun et al, US Patent 5,527,750.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prem C. Singh whose telephone number is 571-272-6381. The examiner can normally be reached on MF 6:30 AM-3:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ps/042806


Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700